

AMENDMENTS TO THE CLAIMS

Claim 1 (Previously Presented): A process for preparing a low-odor hydrogel-forming acrylic acid polymer, which comprises the steps of:

- a) preparing a polymeric hydrogel by free-radically polymerizing a monomer composition comprising at least 50 % by weight of acrylic acid containing volatile saturated carboxylic acids selected from the group consisting of acetic acid, propionic acid and combinations thereof as impurities in a total amount of less than 400 ppm, by weight, based on the amount of acrylic acid, in an aqueous polymerization medium and converting said hydrogel into a particulate hydrogel or into hydrogel-forming powder; and
- b) treating said particulate hydrogel or said hydrogel-forming powder with a crosslinking substance which, actually or latently, contains at least two functional groups capable of reacting with the carboxyl groups on the addition polymer.

Claim 2 (Previously Presented): The process as claimed in claim 1, wherein the acrylic acid polymerized in step a) is an acrylic acid obtained by a single or multiple stage crystallization of a crude acrylic acid having an acetic and/or propionic acid content in the range from 0.1 to 5 % by weight.

Claim 3 (Previously Presented): The process as claimed in claim 2, wherein the acrylic acid monomer of step a) is obtained by single or multiple stage crystallization of said crude acrylic acid at a temperature ranging from 0 to 13°C.

Claim 4 (Previously Presented): The process as claimed in claim 1, wherein the acrylic acid monomer of step a) is in the form of a partially or completely neutralized aqueous acrylic acid solution.

Claim 5 (Previously Presented): The process as claimed in claim 1, wherein the crosslinker in step b) is selected from compounds capable of forming ester groups with the carboxyl groups on the addition polymer.

Claim 6 (Previously Presented): The process as claimed in claim 1, wherein the monomer mixture to be polymerized in step a) comprises, based on its total weight,

- from 50 to 99.99 % by weight of acrylic acid as monomer A,
- from 0 to 49.99 % by weight of one or more monoethylenically unsaturated monomers B which are copolymerizable with acrylic acid, and
- from 0.01 to 30 % by weight of at least one crosslinking compound C.

Claim 7 (Canceled)

Claim 8 (Previously Presented): A hydrogel-forming addition polymer obtainable by a process as claimed in claim 1.

Claim 9 (Previously Presented): A method for preparing a hygiene article comprising:

forming the hydrogel-forming addition polymer as claimed in claim 8 into a shape of said hygiene article.

Claim 10 (Previously Presented): Hygiene articles comprising an absorbent core which contains at least one hydrogel-forming addition polymer as claimed in claim 8.

Claim 11 (Previously Presented): The process as claimed in claim 1, wherein the acrylic acid monomer contains not more than 300 ppm of acetic acid, propionic acid or combinations thereof.

Claim 12 (Previously Presented): The process as claimed in claim 1, wherein the acrylic acid monomer contains not more than 200 ppm of acetic acid, propionic acid or combinations thereof.